CLAIMS:

1.   An integrated database system for performing query processing by combining a plurality of external databases, comprising:

a predicate dictionary including information on connections among predicates used in the query processing and on strengths of the connections; and

query expansion means for referring to the connections among predicates and the strength of the connections included in the predicate dictionary to convert a query, which is thrown into the integrated database system, into one or more query sets.

2.   An integrated database system according to claim 1, wherein, when the connections among predicates by which the query conversion can be performed exist in the predicate dictionary, the query conversion by the query expansion means referring to the predicate dictionary is repetitively applied.

3.   An integrated database system according to claim 1, further comprising:

specification descriptions concerning query processing capabilities of the external databases; and

query extraction means for referring to the specification descriptions to extract queries, which can be executed using the external databases, from the converted query set.

4.   An integrated database system according to claim 1, further comprising query selection means for

referring to the strengths of the connections, which are set in the predicate dictionary, to select an appropriate combination of queries from the converted query set.

5.   An integrated database system according to claim 4, wherein, when the query selection means selects queries, a lower limit of a approximation level and an upper limit of an execution cost both of which are specified in advance are referred.

6.   An integrated database system according to claim 1, further comprising query plan merging means for generating a query plan by merging the queries in the converted query set.

7.   A program storage medium for storing a program which realizes an integrated database system for performing query processing by combining a plurality of external databases, the program storage medium storing:

        a predicate dictionary including information on connections among predicates used in the query processing and on strengths of the connections; and

        a program for realizing query expansion processing which refers to the predicate dictionary to convert a query, which is thrown into the integrated database system, into one or more query sets.